

AMENDMENT

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for indexing voice mail messages, comprising:
 - receiving one or more voice mail messages from one or more callers;
 - determining an identity of each of the one or more callers in each of the one or more voice mail messages (1) by comparing speech signals from each of the one or more voice mail messages with one or more caller speaker models and (2) based on an analysis of the content of each of the one or more voice mail messages;
 - tagging each of the one or more voice mail messages with the respective identity of the caller for each respective voice mail message; and
 - when the identity of the caller of a voice mail message cannot be determined:
 - tagging the voice mail message from the caller as unknown;
 - receiving an identity of the caller from a voice mail subscriber; and
 - creating a storage folder for voice mail messages from the caller corresponding to the received identity.
- 2-3. (Canceled)
4. (Previously Presented) The method of claim 1, wherein the one or more caller speaker models are created from one or more voice mail messages left by a same caller.

5. (Previously Presented) The method of claim 1, wherein the one or more speaker models are created using acoustic features extracted from the voice mail message, the acoustic features extracted using speaker recognition techniques.

6-7. (Canceled)

8. (Currently Amended) A method for indexing voice mail messages, comprising:

receiving one or more voice mail messages from one or more callers;

determining an identity of each of the one or more callers in each of the one or more voice mail messages (1) by comparing speech signals from each of the one or more voice mail messages with one or more caller speaker models and (2) based on an analysis of the content of each of the one or more voice mail messages;

tagging each of the one or more voice mail messages with the respective identity of the caller for each respective voice mail message; and

when the identity of the caller of a voice mail message cannot be determined:

tagging that voice mail message as unknown; and

receiving an identity of the caller from a voice mail subscriber, wherein the voice mail message tagged as unknown is used to adapt a previously created speaker model.

9. (Previously Presented) The method of claim 1, wherein the step of determining the identity of each of the one or more callers in each of the one or more voice mail messages includes the substep of:

using automatic number identification to assist in determining the caller's identity.

10. (Previously Presented) The method of claim 1, wherein the step of determining the identity of each of the one or more callers includes the substep of:

using speech recognition techniques to extract caller identity information from the one or more voice mail messages.

11-20. (Cancelled)

21. (Withdrawn) A method for identifying new speakers in a voice mail system for one or more voice mail subscribers, the method comprising:

determining that a group of speaker models are unable to identify the speaker of a voice mail message;

receiving from a voice mail subscriber speaker identification information for the voice mail message;

using the voice mail message and future voice messages from the speaker to generate a new speaker model for the speaker of the voice mail message as identified by the voice mail subscriber; and

adding the generated speaker model to the group of speaker models for identifying speakers of voice mail messages based on the comparison of the voice mail message with existing speaker models.

22. (Withdrawn) The method of claim 21, wherein receiving from a voice mail subscriber speaker identification information for the voice mail message further comprises:

presenting the voice mail from the unidentifiable speaker to the voice mail subscriber;

prompting the voice mail subscriber to identify the speaker of the voice mail message;

and

receiving the identification of the speaker from the voice mail subscriber.

23. (Withdrawn) The method of claim 21, wherein using the voice mail message and future voice messages from the speaker to generate a new speaker model for the speaker of the voice mail message as identified by the voice mail subscriber further comprises:

if, after the voice mail subscriber identifies the speaker of the voice mail message, a speaker models exists for the identified speaker:

modifying the existing speaker model by using the voice mail message; and

if, after the voice mail subscriber identifies the speaker of the voice mail message, a speaker models does not yet exist for the identified speaker:

creating a new speaker model for the identified speaker; and

adding the modified speaker model or the new speaker model to the group of speaker models.

24. (Currently Amended) A system for processing voice mail messages, the system comprising:

means for receiving one or more voice mail messages;

means for determining an identity of a speaker of each of the one or more voice mail messages (1) by comparing speech signals from each of the voice mail messages with a group of speaker models and (2) based on an analysis of the content of each of the one or more voice mail messages;

means for tagging each of the one or more voice mail messages with the respective identity of the speaker for each respective voice mail message; and

means for, when the identity of the speaker of a voice mail message cannot be determined, tagging the voice mail message as unknown, receiving an identity of the speaker from a voice mail subscriber and creating a storage folder for voice mail messages from the speaker corresponding to the received identity.

25. (Withdrawn) A system for identifying new speakers in a voice mail system for one or more voice mail subscribers, the system comprising:

means for determining that a group of speaker models are unable to identify the speaker of a voice mail message;

means for receiving from a voice mail subscriber speaker identification information for the voice mail message;

means for using the voice mail message and future voice messages from the speaker to generate a new speaker model for the speaker of the voice mail message as identified by the voice mail subscriber; and

means for adding the generated speaker model to the group of speaker models for identifying speakers of voice mail messages based on the comparison of the voice mail message with existing speaker models.

26. (Cancelled)

27. (Previously Presented) The system of claim 24, wherein the speaker models are created from one or more voice mail messages left by a same caller.

28. (Previously Presented) The system of claim 24, wherein the speaker models are created using acoustic features extracted from the one or more voice mail messages, the acoustic features extracted using speaker recognition techniques.

29. (Previously Presented) The system of claim 24, wherein the voice mail message tagged as unknown is used to adapt a previously created speaker model.

30. (Previously Presented) The system of claim 24, wherein the means for determining an identity of a speaker of each of the one or more voice mail messages further comprises means for using automatic number identification to assist in determining the identity of the speaker.

31. (Previously Presented) The system of claim 24, wherein the means for determining an identity of a speaker of each of the one or more voice mail messages further comprises means for using speech recognition techniques to extract caller identity information from each one of the one or more voice mail messages.